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Class Title: Environmental Engineering Specialist  
Organizations/Work Settings: Department of Environmental Quality

Class Code: 37226  
Class Established: 08/31/88  
Revised: 01/01/94  
Pay Grade: 20

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**WORK DESCRIPTION:**

Reviews construction plans for and/or inspects newly constructed/remodeled water/wastewater treatment facilities/systems, hazardous waste and solid waste disposal facilities, or air pollution sources to determine compliance with engineering oriented environmental control rules, regulations, and specifications; recommends issuance of permits and identifies remedial actions necessary.

**WORK CONDITIONS:**

Facility inspections and field sampling necessitate exposure to variable weather conditions and occasionally to hazardous materials/conditions.

**SUPERVISION:**

Works under the supervision of a registered professional engineer. Work is reviewed upon completion to ensure compliance with program procedures/regulations, State and Federal laws, and accepted engineering standards/specifications.

**KNOWLEDGES APPLIED:**

Methods and techniques of engineering analysis as applied to questions of environmental pollution control.

The principles and practices of engineering as relates to environmental control facilities, systems, operating procedures, instrumentation, and related control devices.

Federal and State statutes and agency standards, policies and procedures applicable to the area of assignment.

Policies and procedures established for the environmental control program to which assigned.

**WORK RESULTS/PRODUCTS:**

Complete, accurate review of construction plans for water/wastewater treatment facilities/systems; complete, accurate environmental pollution control reports, including recommendations for abatement; permits issued.

**RESPONSIBILITY:**

For timely and accurate completion of all projects assigned; scheduling and prioritizing workload for self.

**AUTHORITY:**

Independent decision making, within program guidelines and engineering standards/specifications, regarding permit issuance for routine water/wastewater treatment facilities/systems applications.

**SKILLS APPLIED:**

Applying engineering principles, practices, and standards in evaluating construction plans and completed facilities for compliance with environmental control program requirements.

Identifying engineering oriented environmental control problems.

Interacting with agency staff, the regulated business/industrial community, and other governmental regulatory officials to establish and maintain effective working relationships, obtain information, and resolve problems.

Communicating effectively, orally and in writing.

EXAMINES AND ANALYZES CONSTRUCTION OR MODIFICATION PLANS FOR WATER/WASTEWATER SYSTEMS; EVALUATES THESE IN TERMS OF ENVIRONMENTAL IMPACT AND WATER QUALITY CONTROL.

INSPECTS WATER/WASTEWATER SYSTEMS AND SOLID/HAZARDOUS WASTE DISPOSAL FACILITIES TO DETERMINE COMPLIANCE WITH STATE AND FEDERAL STANDARDS AND ACCEPTABLE SANITARY ENGINEERING PRACTICE.

MAKES ENGINEERING CALCULATIONS AND ANALYSES TO EVALUATE PERMIT APPLICATIONS AND PLANS AND TO DETERMINE POTENTIAL FOR DEVELOPMENT OF POLLUTION SOURCES; SUCH CALCULATIONS INCLUDE DETERMINATIONS OF POLLUTANTS TO BE EMITTED, QUANTITIES, ABATEMENT EQUIPMENT AVAILABLE, AND ITS EFFECTIVENESS.

INSPECTS SOURCES OF AIR POLLUTION, CONDUCTS TESTS, EXAMINES CONTROL EQUIPMENT, AND GATHERS DATA AS BASIS FOR RECOMMENDATIONS REGARDING AIR POLLUTION.

WRITES DRAFTS OF NOTICES OF VIOLATION OR CEASE AND DESIST ORDERS AND ROUTES THEM THROUGH SUPERVISOR FOR ACTION.

OBSERVES, ANALYZES, AND EVALUATES RESULTS OF AIR POLLUTION SOURCE EMISSION TESTS; EVALUATES AIR TESTING PROCEDURES, LABORATORY ANALYSIS PROCEDURE, AND THE TECHNICAL EVALUATIONS MADE OF THE DATA COLLECTED.

CONFERS WITH AND ADVISES REPRESENTATIVES OF LOCAL GOVERNMENT OR PRIVATE INDUSTRY REGARDING TECHNICAL ASPECTS OF ENVIRONMENTAL CONTROL.

WRITES DETAILED ENVIRONMENTAL IMPACT REPORTS, IN DESIGNATED FORMAT, BASED ON OWN INVESTIGATION/ANALYSES OF ENVIRONMENTAL CONDITIONS BROUGHT ABOUT BY ACTUAL OR PROPOSED CONSTRUCTION OR OPERATION OF FACILITY.

GATHERS DATA FROM MANUALS, STATUTES, RULE BOOKS, CODES, AND REGULATIONS IN ORDER TO MAKE DETERMINATIONS AND DECISIONS.

PREPARES TABLES, CHARTS, GRAPHS AND OTHER DATA SUMMARIZATION; PERFORMS CALCULATIONS, DRAWS GRAPHIC REPRESENTATIONS, ROUGHS OUT TABLES, CHARTS, OR GRAPHS FOR TYPING OR FINISHING.

Gives and receives information requiring some judgment or discretion regarding current and specific business of the work unit, by telephone or by direct personal contact.

Confers with superior, presenting and resolving difficult problems or questions, discussing plans and actions to be taken, making decisions.

Performs related work as required.

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MINIMUM QUALIFICATIONS:

Two years of professional engineering experience in an environmental protection/control program in the public or private sector; AND a Bachelor's degree in civil or environmental engineering or another are of engineering directly related to environmental protection/control. A Master's degree as above substitutes for one year of the required experience.

Special Selection Factors:

None.